Fig.1

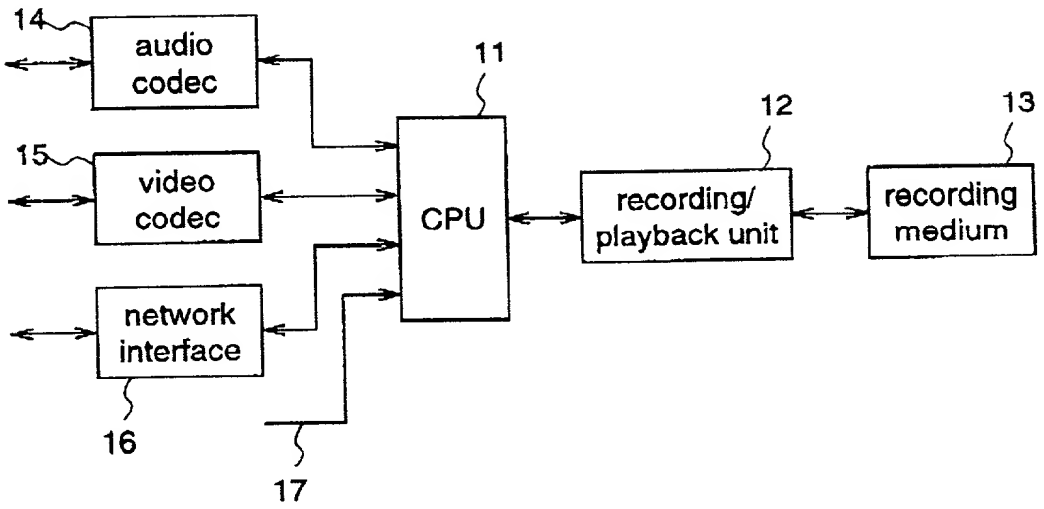

14
audio codec
11
12
13
15
video codec
CPU
recording/ playback unit
recording medium
network interface
16
17

Fig.2

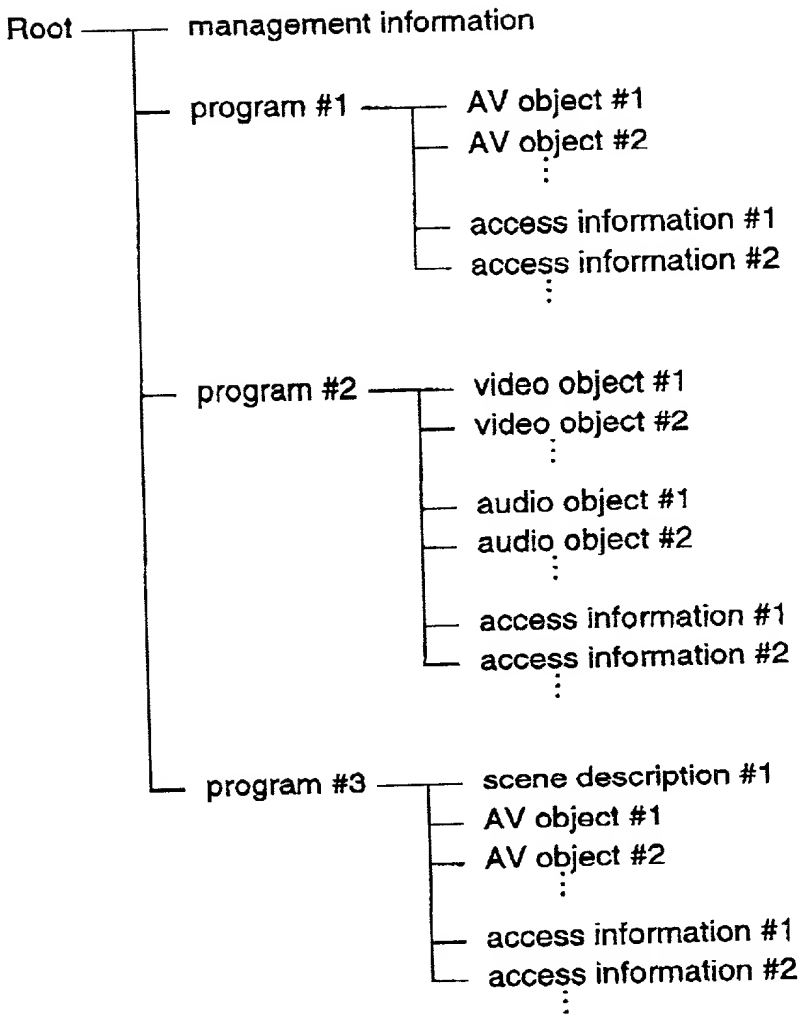

Root
management information
program #1
AV object #1
AV object #2
access information #1
access information #2
program #2
video object #1
video object #2
audio object #1
audio object #2
access information #1
access information #2
program #3
scene description #1
AV object #1
AV object #2
access information #1
access information #2

Fig.3 (a)

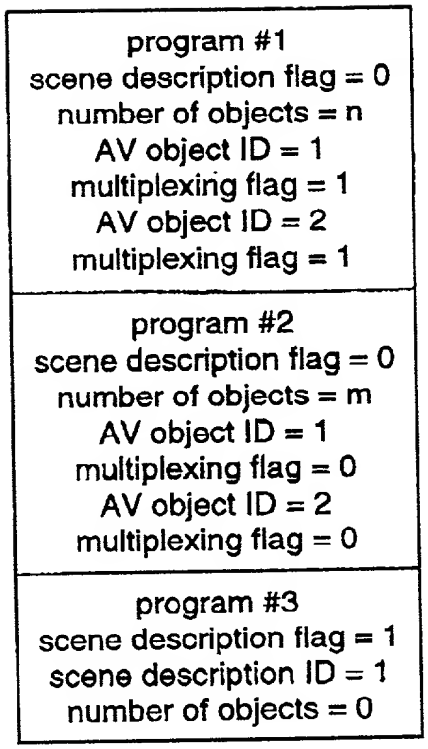

program #1
scene description flag = 0
number of objects = n
AV object ID = 1
multiplexing flag = 1
AV object ID = 2
multiplexing flag = 1
program #2
scene description flag = 0
number of objects = m
AV object ID = 1
multiplexing flag = 0
AV object ID = 2
multiplexing flag = 0
program #3
scene description flag = 1
scene description ID = 1
number of objects = 0

Fig.3 (b)

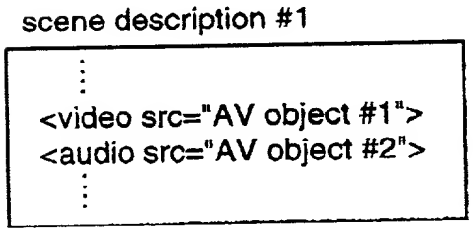

scene description #1
<video src="AV object #1">
<audio src="AV object #2">

Fig.4

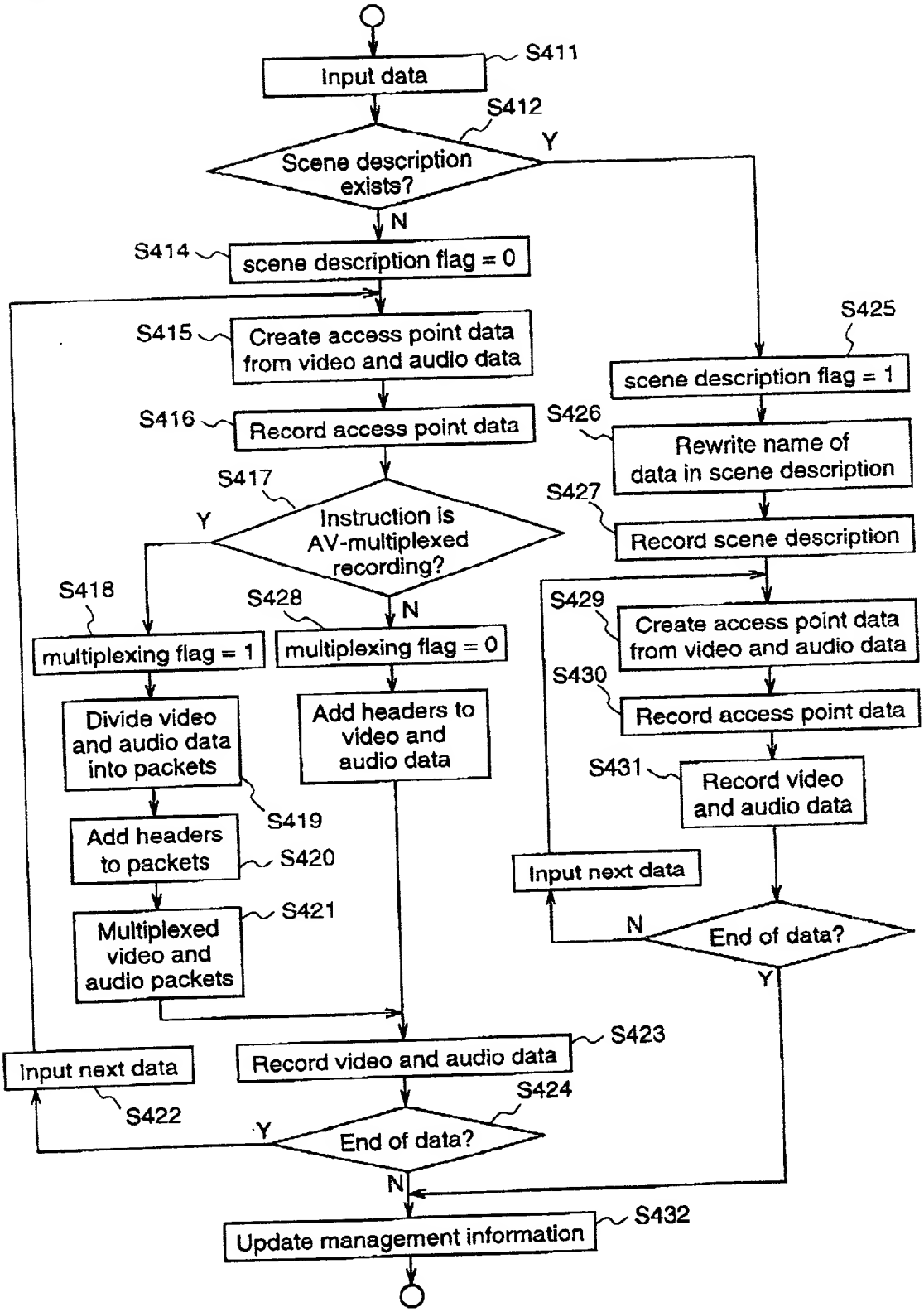

Input data
S411
S412
Scene description exists?
Y
N
S414
scene description flag = 0
S415
Create access point data from video and audio data
S416
Record access point data
S417
Instruction is AV-multiplexed recording?
Y
N
S418
multiplexing flag = 1
S428
multiplexing flag = 0
Divide video and audio data into packets
S419
Add headers to packets
S420
Multiplexed video and audio packets
S421
Add headers to video and audio data
Input next data
S422
Record video and audio data
S423
End of data?
S424
Y
N
S425
scene description flag = 1
S426
Rewrite name of data in scene description
S427
Record scene description
S429
Create access point data from video and audio data
S430
Record access point data
S431
Record video and audio data
Input next data
N
End of data?
Y
S432
Update management information

Fig.5

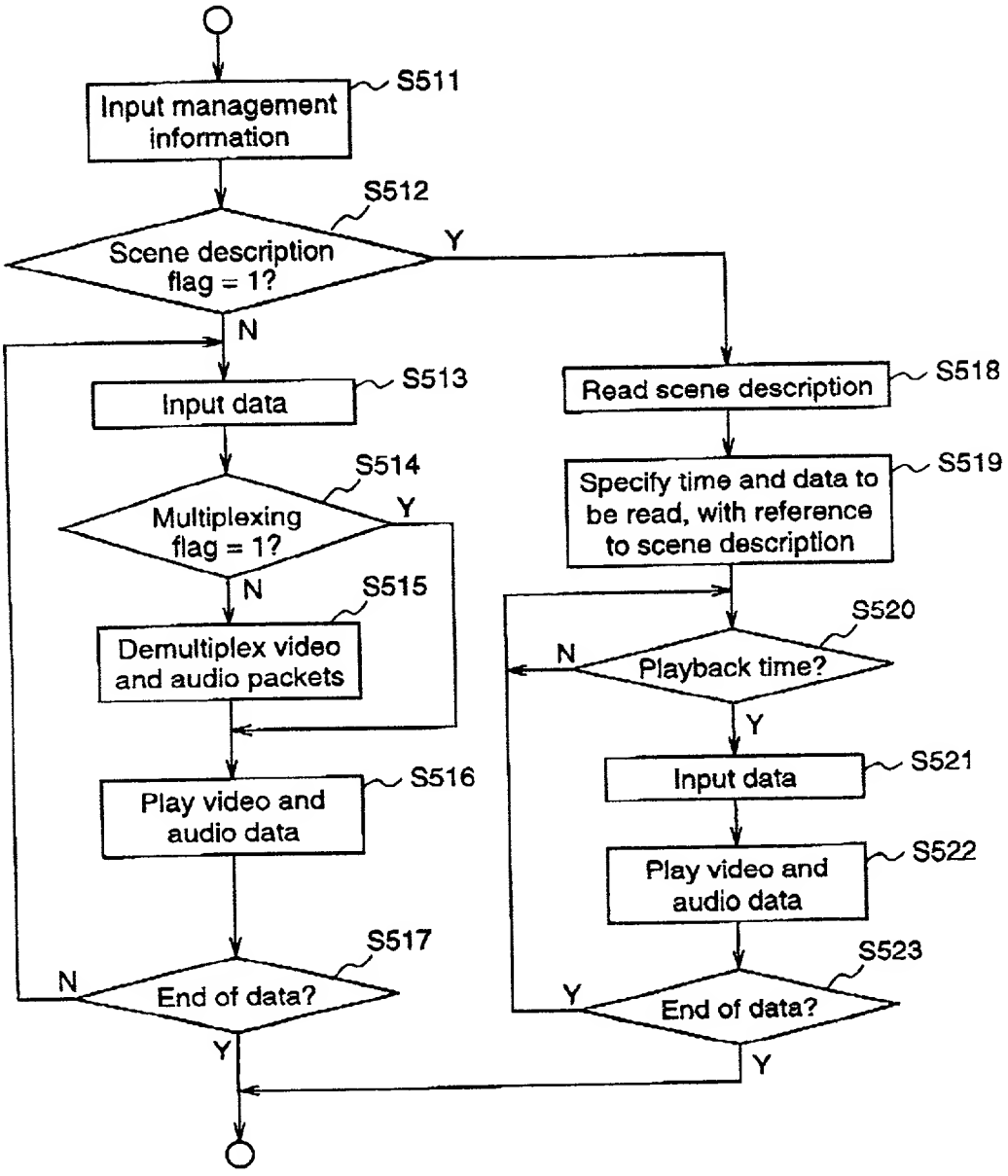
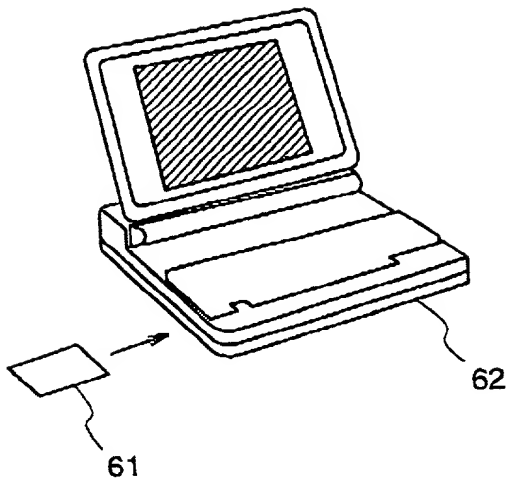

Input management information
S511
Scene description flag = 1?
S512
Y
N
Input data
S513
Multiplexing flag = 1?
S514
Y
N
Demultiplex video and audio packets
S515
Play video and audio data
S516
End of data?
S517
N
Y
Read scene description
S518
Specify time and data to be read, with reference to scene description
S519
Playback time?
S520
N
Y
Input data
S521
Play video and audio data
S522
End of data?
S523
Y
Y

Fig.6



Prior Art

Fig.7 (a)

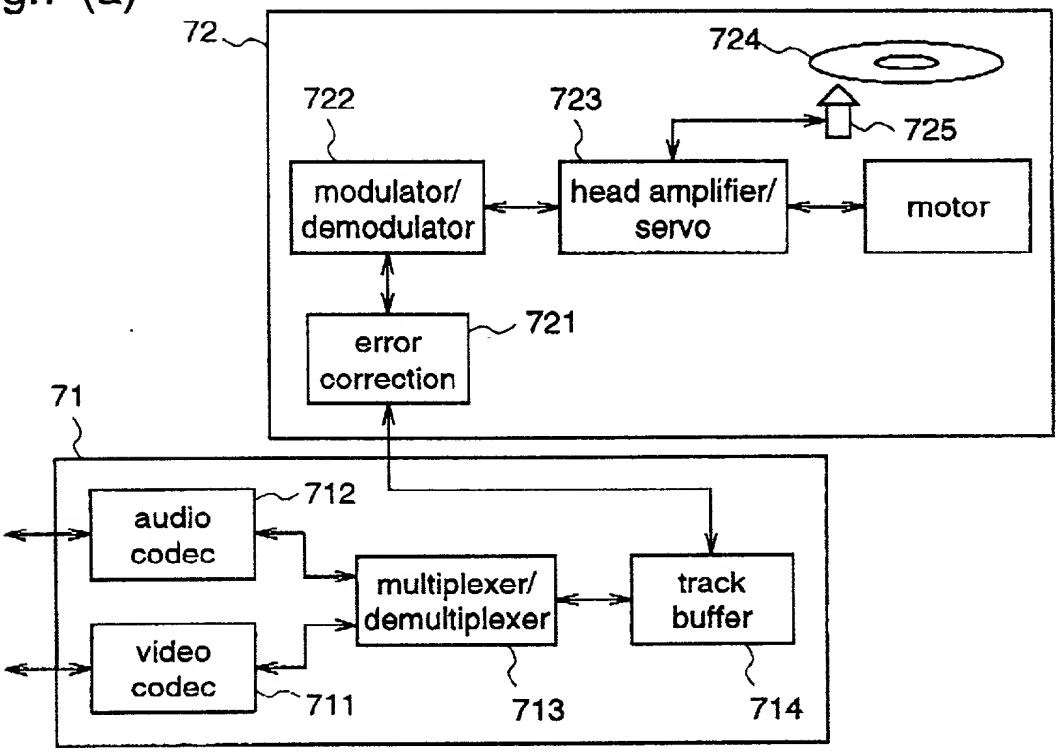


Fig.7 (b)

Fig.7 (c)

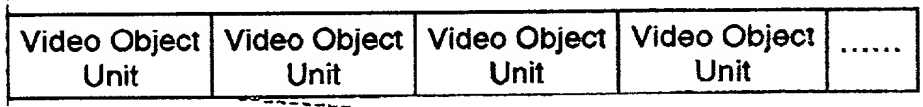
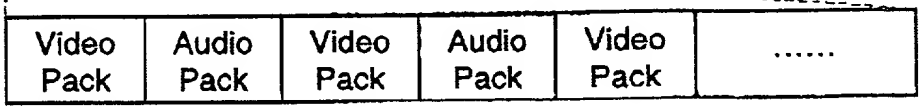



Fig.7 (d)